



112. Auction

Lot No.

190

Estimate

3,000 – 10,000 €

Omega - Constellation Electroquartz f 8192 Hz

A heavy vintage wristwatch in near mint condition, with very early, rare electromechanical precision quartz movement and integrated 18 K gold bracelet

CASE

18 K gold, screwed on back, crown set with tiger eye cabochon, faceted smoky quartz glass, 18 K "Omega" gold bracelet, ref. 391.003, total length 210 mm. Very good, micro scratches.

DIAL

Gilt.
Very good.

MOVM. NO.	31736663
REF.	8345 012
CAL.	1302/CEH Beta-21
DIMENSIONS	30 x 42 mm
CIRCA	1970
ORIGIN	Switzerland
WEIGHT	192 g

This Constellation Electroquartz f 8192 Hz is virtually in the same condition as on the day of its delivery. All edges are sharp, the bracelet is tight without any stretch. The gilt dial is immaculate with an exciting lustre. The watch's horological significance together with its particular look and the breathtaking condition make it a much sought-after classic among the collectors of remarkable vintage timepieces.

Omega is regarded as one of the most innovative watch brands and specialises in implementing new technologies and developments. The first electromechanical Omega watches with calibre Beta-21 (Cal. 1300) were launched in 1970 and became part of the very successful Constellation series. The case form was at the time appropriately futuristic and was a symbol of

state-of-the-art technologie. Today the "Constellation Electroquartz f 8192 Hz" is highly sought-after by collectors because of its rarity and historic importance.

The electromechanical calibre Beta-21 was developed in the late 1960s and was one of the first commercially successful quartz movements. It was developed by a syndicate of Swiss watch makers, which had formed in 1962 as Centre Electronique Horloger (CEH) to research the emerging quartz technology for wrist watches; among them were famous brands such as Omega, Patek Philippe, Piaget and Rolex. In 1969 CEH launched the groundbreaking movement Beta-21, which offered an unprecedented accuracy with a deviation of only five seconds per month. The members of CEH agreed to produce 6,000 Beta-21 movements for the group.

Calibre Beta-21 uses a quartz crystal as oscillator with a frequency of 8.192 Hertz. The oscillations are converted to precise time units. Due to the quartz crystal the Beta-21 movement is extremely accurate in comparison to mechanical movements, so that minimal deviation in timekeeping is ensured. The movement uses an electronic control system, which converts the quartz crystal's oscillations to impulses to drive the wheels of the watch movement. In contrast to later quartz movements the Beta-21 calibre uses a multiphase motor to move the hands, which ensures an even motion. Calibre Beta-21 is rather large, which means that watches powered by this calibre are often bigger than traditional mechanical watches. Due to its size and complexity, calibre Beta-21 was only used for a limited time and a limited number of models, before it was replaced by smaller and more efficient quartz movements. Today calibre Beta-21 is a remarkable piece of horological history, because it marks the transition from mechanical to electronic watches and at the time also heralded the beginning of the quartz era in watchmaking.



